

Abstract

Method and system for improving the quality of transportation of selected data packets over a data network. Selected nodes, being packets' source/destination, are utilized to access the data network. One or more intermediate nodes are selected for generating a plurality of alternative paths, between a source node and a corresponding destination node, via which data packets will be forwarded. Each optimal path may be defined according to predefined or tested parameters, characterizing the path. A modified header is generated and attached to the selected packet, which contains addresses corresponding to consecutive nodes along a corresponding optimal path. Each selected packet is forwarded from the source to the destination, and at each intermediate node the modified header is processed and the address of the next consecutive intermediate node is extracted and utilized for forwarding the selected packet to the consecutive intermediate node. In the destination node, the original header is used.

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